**AMENDMENTS TO THE CLAIMS**:

1-12. (Canceled)

13. (Currently Amended) An isolated [A] winter wheat chitinase cDNA wherein ~~characterized in that~~ said cDNA encodes a protein with chitinase activity at low temperatures of 0°C or below, and wherein ~~further characterized in that~~ said cDNA comprises 771 nucleotides which encode an amino acid sequence comprising 250 amino acids ~~and encodes an amino acid sequence~~ that is 98% identical with an amino acid sequence encoded by ~~barley chitinase cDNA having~~ nucleotide sequence SEQ ID No: 6.

14. (Previously Presented) A winter wheat chitinase cDNA according to claim 13, wherein ~~characterized in that~~ said cDNA has nucleotide sequence that encodes an amino acid sequence listed as SEQ. ID No. 1 in Fig. 1.

15. (Currently Amended) An isolated [A] winter wheat chitinase cDNA characterized in that said cDNA encodes a protein with chitinase activity at low temperatures of 0°C or below, and wherein ~~further characterized in that~~ said cDNA comprise 972 nucleotides which encode an amino acid sequence comprising 323 amino acids ~~and encodes an amino acid sequence~~ that is 68% identical with an amino acid sequence encoded by ~~rye chitinase cDNA having~~ nucleotide SEQ ID No: 7.

16. (Currently Amended) A winter wheat chitinase cDNA according to claim 15, wherein ~~characterized in that~~ said cDNA has nucleotide sequence that encodes an amino acid sequence listed as SEQ. ID. No. 2 in Fig. 2.

17. (Currently Amended) An isolated [A] winter wheat chitinase cDNA wherein ~~characterized in that~~ said cDNA encodes a protein with chitinase activity at low temperatures of 0°C or below, and wherein ~~further characterized in that~~ said cDNA comprises 960 nucleotides which encode an amino acid sequence comprising 319 amino acids ~~and encodes an amino acid sequence~~ that is 95% identical with an amino acid sequence encoded by ~~spring wheat chitinase cDNA having~~ nucleotide SEQ ID No: 8.

18. (Previously Presented) A winter wheat chitinase cDNA according to claim 17, wherein ~~characterized in that~~ said cDNA has a nucleotide sequence that encodes an amino acid sequence listed as SEQ. ID. No. 3 in Fig. 3.

19. (Withdrawn) A method of isolating a winter wheat chitinase having a nucleotide sequence that encodes an amino acid sequence listed as SEQ. ID. No. 1 in Fig. 1, a winter wheat chitinase cDNA having a nucleotide sequence corresponding to an amino acid sequence listed as SEQ. ID. No. 2 in Fig. 2, or a winter wheat chitinase cDNA having a nucleotide sequence corresponding to an amino acid sequence listed as SEQ. ID. No. 3 in Fig. 3, said method comprising the steps of:

extracting mRNA from winter wheat variety that has undergone a sufficient hardening process:

preparing cDNA and a cDNA library based on said mRNA;

analyzing nucleotide sequences of a number of plant-derived chitinase cDNAs which have all been published by EMBL/Genebank/DDBJDNA Databank;

designing a pair of chitinase cDNA-specific degenerated primers with reference to highly conserved nucleotide sequence portions of the plant-derived chitinase cDNAs;

conducting PCR (polymerase chain reaction) using a pair of chitinase cDNA-specific degenerated primers and using said cDNA as a template, thereby amplifiying fragments of chitinase cDNAs and obtaining amplified DNA fragments; and

using said amplified DNA fragments as probes for screening said cDNA library by a hybridization assay, to isolate recombinant plaques containing full length cDNA.

20. (Withdrawn) The method according to claim 19, wherein one of said a pair of chitinase cDNA-specific degenerated primers has the following nucleotide sequence:

(Forward): 5' C-A-C-G-A-G-A-C-C-A-C-N-G-G-C-G-G-N-T-G-G-G-C

(SEQ. ID. No. 4),

and the other has the following nucleotide sequence:

(Reverse): 5' A-C-N-A-A-T-A-T-C-A-T-C-A-A-C-G-G-C-G-G

(SEQ. ID. No. 5).

21-22. (Canceled)

23. (Previously Presented) A plant transformed with a cDNA according to claim 14.

24. (Previously Presented) The winter wheat chitinase cDNA of claim 14, wherein the cDNA has been synthesized from mRNA extracted from winter wheat.